TCTUG

Twin Cities TRS-80 User's Group

VOLUME 5 NUMBER 7 JULY 1985

The Ancient Computerist

There is some talk these days about computer data storage on laser disks. Some companies are talking about offering versions of CD disk players as memory peripherals for personal computers. There are some experts, however, that predict such devices will not sell well. The problem they see is the lack of ability for the user to write or erase information from these disks. The disks would be identical to those now used as hi-fi programming media in CD players. They are, in fact, read-only-memory, or ROM. These experts say that most users would not find a ROM type of mass memory useful, even if it can store 600 megabytes of informtion. But think for a minute-that is a whopping amount of storage. What could publishers put on such disks that would be useful? Many things. Since the drives would be only slight modifications of devices selling on the hi-fi market for less than $300, they should be reasonably priced to use as a supplement to magnetic disks, not as a replacement.

Think of the spelling dictionary that could come on such a disk. It could contain all the words found in an ordinary desk dictionary, with plenty of space left over for other uses. Think of the sophisticated word processor programs that could be written with such memory available. Think also of the great adventure programs these devices could allow. Many hundreds of nodes could be available, each with high resolution graphic screens with all the resolution needed for a 1000/1200/2000.

Now that the ROM is so ubiquitous we tend to forget how important it is. Many of you do not remember the early days of computers. When a computer was brought up from a cold boot, it was an absolute idiot. It could not even read a tape. The system operator had to enter a machine language bootstrap program into the machine by hand, using front panel toggle switches. This program would then give the machine enough smarts just to load the operating system. Yes, no BIOS chips, no operating systems on ROMs-no ROMs. What a great invention!

Twin Cities TRS-80 User's Group

MEETING NOTICES
and COMING EVENTS:

TCTUG meets on the last Tuesday of each month.

LOCATION: Hennepin County Gov't Center, 300 South 6th Street, Minneapolis, Minnesota
(ask guard for exact location in the building)

TIME 7:00 to 9:00 (social hour 6:30 to 7:00)

MEETING TOPICS:

July 30:
Optical Character Reader
By Al Sampson
Editors note: We are sure that all will enjoy thistopic. Character readers have the ability to read booksand allow business and hobbies alike to tap a new area.
SIG.-Business users gathering.

August 27:
The Model 100; interfacing and Programing

Sept 24:
MSDOS:

OFFICERS:
President: Scott Sinks
Vice Pres.: Denny Mix
Secretary: Brian Glynn
Treasurer: Tim Bonham

MAJOR CONTRIBUTORS:
Newsltr Editor: Duane Stabler
Membership Chair: Grace Jacobs
Librarians:
Tim Fogarty-Model 1
Gary Schlegel-Model 3
Brian Glynn-Model 100
-Model 2
Mike Zarowitz-Model 4

BOARD OF DIRECTORS:
Tim Bonham, Tim Fogarty, Grace Jacobs, Carl Larson, Denny Mix, Brian Glynn, Clayton Haapala, Paul Hansen, John Perry, Scott Sinks, Duane Stabler, Don Stauffer, Mike Zarowitz;

TCTUG NEWS is a monthly publication of TCTUG published at 11228 Radisson Dr., Burnsville, MN 55337. All submissions should be sent to the editor at the above address.

CLUB INFORMATION call:
Grace Jacobs 452-6797
Duane Stabler 894-7282

The Twin Cities TRS-80 Users Group (TCTUG) Newsletter is a monthly publication of TCTUG published at 11228 Radisson Dr. Burnsville Mn. 55337. All submissions should be sent to the editor, Duane Stabler at the above address. We accept reviews, tutorials, editorials, poetry etc. concerning all Tandy Radio Shack computers and their clones. Eight articles are needed from readers every month.
TRS-80 is a registered trademark of Tandy Radio Shack.

TANDY COMPUTERS IN BUSINESS

Many members use TRS-80's and the Tandy Computers in their businesses. Word processing, data file management, networking, general ledger, etc. Each meeting one or more of these individuals shows up. Often I find that the very person that individual would enjoy talking computers with had been there the month before and I had not noted a name or phone number, so there is no way to get these individuals with common interests in touch with one another. Let's do something about this at the July meeting.

The general topic, optical scanners (not to be confused with the simplier and also useful bar code readers) should be of particular interest to those who want to make their computer investment payoff at a maximum. So a special invitation to all model 2/12/16 and 1000,1200,2000,6000 owners as well as the 100's, 1,3,and 4's.

We hope to have some specialists available for the last part of the meeting. They have not all made commitments yet, but we expect to have a COBOL expert and someone who has been working with XENIX for over two years and a member of TCBUG. If there is some other aspect you would like to discuss (such as using hard disks) come along and we will try to get you together.

SEE YOU ALL JULY 30th.

IN THE MAIL BAG

The listing of programs in the TRS-80 Public Domain Library distributed by Fax Plus is available. The programs are distributed in categories - Utilities, Business & Home, Education, Communications, and Games. We have the entire Education library.

AUGUST 1 DUES $15

Dues go to $15/year on August 1. Anyone whose dues are received before that date will have their membership extended one full year from the due date at the current rate of $12 regular and $5 associate. Your due date is the first 4 digits on the upper right of your label. Many long standing members are due 8508, August of this year. Early renewal will permit one last year at the old rate. Please send the form with your check.

IN THE STACK-July 85
by Duane Stabler

The board is always looking for interesting topics for meetings. Have any topics or ideas? We can use the input so we know what the membership wants to learn about. Call Scott Sinks with your suggestions.

TCTUG newsletters available to new members. The complete set of past NL's are available to borrow from me-call me at 894-7282 to check them out. There are lots of good model 1,3,4 articles and programs you can copy.

This month has been the worst I have had for input for the newsletter in months. Keep this up and we'll have a quarterly newsletter. Your board contribute a number of hours monthly so that TCTUG can exist-don't you think you can contribute a little too? Sure not everyone has time to be superactive but a little from each member can create a vast pool of knowledge for all of us to learn from! Please help by becoming active in TCTUG.

Tandy SIG Promotion!

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**** IMPORTANT DELPHI PROMOTION ****

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With Delphi's approval, I've created a special promotion and online registration for our TANDY SIG, but I need everyone's help to tell the world about it!!

The promotion runs until July 31st, so we must spread the word to as many people as possible! Please HELP!

Many thanks!

Bryan Eggers, SIG Manager

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DELPHI, the finest, most progressive worldwide online and communication network available today, wishes to extend a special invitation to you.

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To promote our new TANDY USER'S GROUP, we're offering a FREE lifetime DELPHI membership! (The normal membership fee is $49.95). This offer expires July 31st, 1985.

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Compare DELPHI to other information services:

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* No monthly minimum charge!
* No premium for 1200 baud service!
* No charge for using Tymnet or Uninet!
* $6.00 per hour connect charge for non-prime time usage.

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A special information and online registration account has been created for you. Your username is TANDY and the password is "SPECIAL OFFER". You can access DELPHI and read all about the TANDY USER'S GROUP and DELPHI, then sign up for your own account. You'll receive a temporary password immediately and you won't be charged for this online registration.

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How to Sign On Using Uninet

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1. Dial your local Uninet number. (call 800-821-5340 and ask for the access number in your area).
2. Type <ENTER><.><ENTER> at the !x! prompt. (that is ENTER, PERIOD, ENTER).
3. At the "Service:" prompt type PROF3<ENTER>.
4. At the next "Service:" prompt type DELPHI<ENTER>.
5. At "Username:" type TANDY<ENTER>
6. At "Password:" type SPECIAL OFFER<ENTER>

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You can also sign on to Delphi directly at 617-570-0862 or through Tymnet. If you need assistance, please call Delphi at 1-800-544-4005 (Mass. 617-491-3393).

WILL A 1200 BAUD MODEM SAVE MONEY??

PROBLEM: Exactly what is BAUD? I'm thinking of getting a 1200 Baud modem to reduce my CIS charges, but my friend tells me the savings would be insignificant. My argument is that while the CIS rate for a 1200 baud line is approximately 2 1/2 times that of a 300 baud line, a 1200 baud modem is 4 times faster than a 300 baud modem, therefore the overall charge per byte would be cheaper. He contends that a 1200 baud modem is NOT 4 times faster than a 300 baud modem. Who is right?

ANSWERS:

The unit "baud" is now an international standard unit of information transfer rate. "BAUD" is short for "Baudot", the name of the 5-bit code used in teletypes for so many years (Actually, the code is Murray, not Baudot). The term has come to mean "bits per second". When you calculate the throughput of data, you must remember that a typical ASCII byte contains eight bits, but that at least two other bits are being sent also: a start bit and at least one stop bit. Now, if you could send Baudot at 300 baud, you'd be getting more characters into that 300 bits, but as it is, we're stuck with ASCII, which gets us about 30 characters per second. (I should point out that "1200 baud" standard is really only 600 baud though it handles 1200 bits per second; it's a biphase modulation system that packs twice as much information into the stream as the definition of "baud".)

While it's true that 1200 baud is a rate 4 times as fast as 300 baud, your friend is correct that it is *not* 4 times as fast in practice to a time-sharing system such as CIS. The reason is that quite a bit of the time spent on the system is spent waiting for something to happen. For instance, when I type in a message, each time I end a line, there's a delay of almost one second before the new line-number prompt appears to let me type the next one. These "dead time" delays have no relation to the transmission speed; they'll last as long at 1200 as they do at 300, and cost you twice as much to boot. Add to that any typing, reading, or scratching your head while on line and you will be doing well to get twice the thru-put at 1200 baud as 300. The only real use, to me, for 1200-baud CIS operation is when uploading or downloading files. In this case, the "dead time" is at a minimum, and then the connect-time cost is nearly cut in half. It simply is not cost effective for my normal message scanning habits.

THREE NEW UTILITY PACKAGES FOR THE TRS-80 MODEL 4/4P: (for TRSDOS 6.2)

If You're "Out of Sorts" Because Your Current Sort Leaves You "Out of Memory".....How about THE Disk Virtual Sort Utility for the Model 4/4P?

DSM4 is a high speed, disk virtual sorting utility which eliminates the burden of sorting from your applications software. DSM4 will create and maintain index files for you. Since the sort is disk virtual, your only limitation is the amount of available disk space, not available memory.

DSM4 can sort almost any type of field in a file. The length of each field may be up to 253 bytes. The field types that DSM4 will handle include compressed integer, single precision and double precision fields, in addition to ASCII data. Single and double precision numbers may be in the format used by Model 4 Microsoft BASIC, or may be in 'C' floating point format (as implemented by Manx AZTEC 'C').

With DSM4, disk files can be up to 65535 logical records, with an LRL of 1 to 1024 bytes. You may specify up to 24 select fields to determine which records will be included in the sort. Any type of relation (e.g equal to, less than, greater than or equal to, etc.) may be applied to your selection

criteria. In addition, logical operators (AND/OR) may be used. For instance, "sort by Zip people with a last name of either Smith or Jones". Additional fields may also participate in the sort. Example: sort in Zip Code order and alphabetically within the same Zip Code. Sorting may be in either ascending or descending order.

DSM4 may be instructed to skip records that match a user specified "deleted record" value. You may also save a "template" of the sort/select specifications top disk, and control DSM4 with JCL.

Perhaps the most impressive feature of DSM4 is the speed of the sort operation. Compare these statistics to the sorting method you are currently using: Select, sort and create an index of 1000 records. Selecting and sorting on a name, zip code, and two double precision fields (41 characters) will take under 30 seconds from floppy disk, under 20 seconds on hard disk.

BEEP from Logical systems will enhance Your TRSDOS 6.2 BASIC! BEEP (BASIC Enhancement and Extension Package) adds several enhancements to TRSDOS 06.02.00 BASIC. BEEP is designed exclusively to run on the Model 4/4P under this version of TRSDOS 6.

BEEP provides "abbreviations" for the commands: AUTO, EDIT, DELETE and LIST. To use the abbreviations, you simply enter the first letter of the appropriate command. Example: to edit line 20 of a program, you would enter E20. BEEP also provides "immediate command keys" through the use of the <ARROW>, "period" and "comma" keys. These keys will act as "immediate" keys when pressed as the first entry on the BASIC command line. The immediate functions are: edit the current line, list the current line, list the next program line, list the previous program line, list the first program line and list the last program line. Example: to edit the current program line, press the "comma" key (<ENTER> is not needed).

Other enhancements found in BEEP include: "move" a program line to a different "place" in your program, "duplicate" a program line, and high speed program Load and Save. BEEP will load a 26K program in under six seconds and save the same program in eight seconds. Compare this to "unenhanced" BASIC which takes 25 seconds to load the same program and 28 seconds to save it. $49.

Get That EXTRA BURST OF PERFORMANCE ..... with OVERDRIVE from Logical Systems! OVERDRIVE will help you get that extra burst of performance from your 128K Model 4/4P running under TRSDOS 6.2.

OVERDRIVE will perform dynamic track buffering on up to two disk drives using a portion of your alternate memory. In addition, all non-library system overlays (1-5 and 9-12) will be placed in alternate memory for very fast access. In this mode a (very!) minimum system disk may be used as your system drive to maximize your available disk space. All this uses just 32K of your 64K alternate memory, so you can still use memDISK or the system SPOOLer if desired.

Some typical OverDrive speed increases: FED II search a 28K file: 47 seconds without OverDrive, 8 seconds with OverDrive Load a 4K BASIC program: 23 seconds without OverDrive, 15 seconds with OverDrive. $99.

Note: TRSDOS 6.2 is required, but not included with DSM4, BEEP and OVERDRIVE. These utilities are now

INFO-TUG/Models 1000,2000

FELLOW USERS

Model 1000

Larry Seaborg	780-4266
Dan Landmark	564-3827
Don Stauffer	421-1289

MODEL 1200

Earl Kelly	460-6212

Model 2000

Dan Landmark	564-3897
Bill Bratt	934-5656
Frank C. Grey	926-7406
Merle Elliott	926-4970
Dave Siegler	435-3514
Gary Grivna	561-2836

SOFTWARE

MSDOS 1200,1000

I	John Perry	571-7918
A	Scott Sinks	774-4075

MSDOS/BASIC (2000)

	Russ Christensen	786-7083
A	Clayton Haapala	934-7063
I	Cliff Wells	772-1322
I	Tim Fogarty	447-3545
I	Frank Gray	926-5773

WORDSTAR (1200,2000)
(Professional options Pkg)
(STARINDEX)

I	John Perry	481-2637
I	Tim Fogarty	447-3545

HOME ACCOUNTANT (2000)

Russ Christensen	786-7083

LIBRARIANS

MODEL 1000

John Perry	571-7918

MODEL 2000
(Volunteer needed)

**Members are asked to remember that TCTUG does not encourage the pirating of software. We exchange information about commercial packages of software.

An extensive library of public domain software is available free of charge to all members of TCTUG. The index is too long to reprint, and growing every day. Please see John Perry at the meeting or call to ask about obtaining a particular type of program.

To download library programs from the United Bulletin Board use either 300/1200 baud. The phone number for UNITED BBS is , 731-1063. You must first call 774-9968 and get a user's ID and password. After entering the UNITED BBS move from the main menu to file transfer by typing "F" then "T" for TCTUG Download Menu. Direct file transfer may be accomplished by "D symbol FILENAME" (Symbols are A=ASCII, M=MODEM/CMD, U=ULTRATERM, X=XMODEM).

The Model 2000 is RELATIVELY NEW ON THE SCENE. By letting you know others owning the model we hope that you can help each other get started. Hope you will all share and enjoy your model better.

For business applications, etc. you may be interested in the Tandy Computer Business Users Group, P.O. Box 17580, Fort Worth, Texas 76102, (817) 390-2197. Their dues are $100/year including a newsletter at irregular intervals.

When you buy other maker software from Radio Shack be sure to get the correct customer support phone number from the salesman. RS does not support this software but does have the numbers on hand.

10 COMMANDMENTS FOR FLOPPY DISKETTES

I know that you have heard it all before, but a reminder never hurt.

1. Refrain from smoking, eating, or drinking when handling a diskette to keep from contaminating the media surface.

2. Never allow the diskette to be placed near a magnetic field created from objects such as magnets, electric motors, transformers, etc. Contact with these objects could and probably will result in a loss of data.

3. Do not bend or fold a diskette. This will result in damage to the media such as an indentation and head to media contact will be degraded. This, in turn, will cause a loss of data during a read operation.

4. Never use paper clips or rubber bands on a diskette. This could cause jacket and/or media damage resulting in possible operation failure.

5. Do not touch or attempt to clean the media exposed by the jacket openings. This could result in media contamination and possible system failure.

6. Never allow a diskette to be exposed to excessive heat (greater than 125 deg. F) or direct sunlight. This can cause distortion in the PVC jacket and, thus, may result in data loss due to head conformance problems.

7. Never place heavy objects on a diskette. Heavy objects could either bow the jacket or cause permanent damage to the media.

8. Whenever a write-on label is full, replace it with a new one. Never stack these labels on top of each other, as eventually the diskette thickness could be such that drive insertion problems could result.

9. Never try to erase information written on the write-on label as the eraser debris could get into the diskette and could lead to diskette and/or drive damage.

10. Use only a soft felt-tip pen to write on the labels. Indentations could result from ballpoint pens or pencils and result in read errors.

CLASSIFIED ADS

Classified Ads July 85

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WANTED:
PUBLIC DOMAIN PROGRAMS, Public domain programs for the TCTUG library. Bring programs on tape or diskette to the monthly meeting. Your disk or tape will be returned at the next meeting or immediately if a machine is available for copying. Document programs with title, author, date, machine compatibility, release to public domain etc, TCTUG will APPRECIATE YOUR CONTRIBUTIONS

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Notice: It will be YOUR responsibility to call me and request an extension to the ad in this column. So call me at 894-7282. Duane Stabler

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FOR SALE:
Assorted Model I Parts and accessories. Phone Denny 774-9968.

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FOR SALE:
Two Remex double sided, double density disk drives with power supply and manual. $225. Phone Scott 469-6754(days) or 774-4075(evenings).

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Wanted:
Information from an experienced user of High Resolution Graphics on the Model III. Phone Grace. 452-6797.

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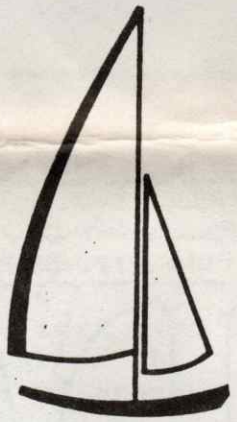

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JULY 1985

TCTUG

TWIN CITY TRS-80 USER GROUP

TCTUG NEWS
11228 Radisson Dr.
Burnsville, MN 55337

MINNEAPOLIS, MN 554
JUL 12 PM 1985

USA 22

Alphabit Commons Inc
13349 Michigan Ave
Dearborn Mi 48126

TCTUG

Twin Cities TRS—80 User's Group

TCTUG Membership Application

Name _____

Address _____

City _____ State ____ Zip _____

Phone Area Code _____ / _____ - _____

What equipment do you have?

_____

_____

_____

Special Interests:

_____

_____

_____

Date: ___/___/___

New Member ( ) Renewal ( )

Dues are $12/year (including Newsletter subscription)
$4/year for additional family members
(Make checks payable to TCTUG.)

Mail to:
TCTUG Membership
c/o Grace Jacobs
3441 Highlander Dr.
Eagan, MN 55122